

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: R30-03900001-2009 (4 of 5)

Application Received: March 13, 2009

Plant Identification Number: 03900001

Permittee: **E.I. DuPont de Nemours & Co., Inc.**

Facility Name: **Belle Plant**

Mailing Address: **901 W. DuPont Ave.**

Belle, WV 25015

Physical Location: Belle, Kanawha County, West Virginia
UTM Coordinates: 451.90 km Easting • 4232.60 km Northing • Zone 17
Directions: US Route 60 exit, then right onto Dupont Avenue, then left at plant gate.

Facility Description

Manufacture of various organic chemicals. Production of "Vazo" and glycolic acid.

SIC codes: 2869; 2879

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions (Group 4 Only)	2007 Actual Emissions (Facility Wide)
Carbon Monoxide (CO)	8.0	894.2
Nitrogen Oxides (NO _x)	2.0	510.0
Particulate Matter (PM ₁₀)	1.0	1.75
Total Particulate Matter (TSP)	1.0	13.6

Sulfur Dioxide (SO ₂)	<0.01	1,019.8
Volatile Organic Compounds (VOC)	7.0	626.2
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions (Group 4 Only)	2007 Actual Emissions (Facility Wide)
Total HAP's	5.3	72.46

Title V Program Applicability Basis

This facility has the potential to emit more than 500 TPY of CO, 1005 TPY of SO₂, 1,200 TPY of NO_x, and 500 TPY of VOC's. Due to this facility's potential to emit over 100 TPY of CO, SO₂, NO_x, and VOC's, as well as over 10 TPY of any single HAP and 25 TPY for total HAP's facility wide, DuPont Belle is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR7	Particulate Matter emissions
	45CSR10	Sulfur Oxide Emissions
	45CSR11	Standby plans for emergency episodes.
	45CSR13	
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR16	New Stationary Sources
	45CSR21	VOC Emissions
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 60 Kb	Tanks
	40 C.F.R. Part 60 NNN	Synthetic Organic Chemical Manufacturing Industry Distillation Operations*
	40 C.F.R. Part 63 F, G, H	Hazardous Organic NESHAP*
	40 C.F.R. Part 63 MMM	Pesticide Active Ingredient*
	40 C.F.R. Part 63 FFFF	Miscellaneous Organic NESHAP
	40 C.F.R. Part 61	Asbestos inspection and removal
State Only:	45CSR4	No objectionable odors.
	45CSR27	Toxic Air Pollutants
* These requirements are applicable for the facility, but not for this Group.		

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-1399A	12/10/2001	
R13-1534B	7/17/2007	
CO-R21-97-31	9/10/1997	
CO-R27-91-40A	11/14/1991	
CO-R27-92-45A(91)	5/27/1992	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

This is a renewal of the Title V permit. The following changes have been made to the most recent version of this Permit:

R13-1534A, which was the current Permit when the initial Title V permit was issued has been updated to R13-1534B. The modification eliminated two tanks. These changes were already included in the most recent version of the Title V Permit.

Condition IV.10 of Consent Order CO-R27-91-40A has been added to the Permit. Though the facility has always been subject to this Condition, the Permittee requested it be added to the Permit in order for their operators to have the applicable requirements in this Permit.

The NOx Budget Trading Program provisions have been removed from this Group 4 permit. Provisions relating to ozone season NOx reduction requirements for applicable units under 45CSR1 and 45CSR26 shall not apply to the ozone season beginning in 2009. The Rule 40 Control of Ozone Season Nitrogen Oxides Emissions does apply to one boiler at this facility, but the boiler is covered under the Group 1 of 5 Title V permit.

Vazo

40CFR63 Subpart FFFF – *Miscellaneous Organic NESHAP ("MON")*
The Vazo Unit is subject to Subpart FFFF.

Condition 4.1.13 contains the requirements for equipment leaks for equipment that is in organic HAP service. The facility is using the provisions of 1.b. of Table 6 of Subpart FFFF, which requires compliance with Subpart H, with exceptions as listed in 40CFR63§§2480(b) and (d).

The Permittee uses a flare and thermal oxidizer separately to control different continuous Process Vents at the facility.

Condition 4.1.14 contains the requirements for Group 1 Continuous Process Vents that are controlled by a combustion device (not a flare). The Permittee has chosen to use 1.a of Table 1 to comply with 40CFR63§2455(a). 40CFR63§2450(e) requires the Permittee to comply with 40CFR63§63.982(c) when reducing organic HAP emissions by venting emissions through a closed-vent system to an incinerator. 40CFR63§63.982(c)(2) requires the Permittee to follow the operating requirements of 40CFR63§988 for incinerators. 40CFR63§988(b) requires an initial performance test to comply with that section, said testing being done as described in 40CFR63§997. This testing was completed on October 7, 2008, and established that the thermal oxidizer be operated at or above 1,350°F. Condition 4.1.2 requires the Permittee to operate the Thermal Oxidizer V002 (217.003) above 1,350°F.

Condition 4.1.15 contains the requirements for Group 1 Continuous Process Vents that are controlled by a flare. The Permittee has chosen to use 1.b of Table 1 to comply with 40CFR63§2455(a). 40CFR63§2450(f) requires the Permittee to comply with 40CFR63§63.987(b) when reducing organic HAP emissions by venting emissions through a closed-vent system to a flare. 40CFR63§63.987(b)(1) requires the Permittee to conduct an initial flare compliance assessment for the flare as described in 40CFR63§998(a)(1). As a result of this assessment, it was shown that proper operation of the Flare SB001 (121.001) is achieved with a flare interlock switch set at 550°F or higher. This operating parameter is required in Condition 4.2.7.

Condition 4.1.16 contains the requirements for Group 1 Batch Process Vents that are controlled by a combustion device (not a flare) with an efficiency of at least 98%. The Permittee is using the provisions of 1.a. of Table 2 to meet the requirements of 40CFR63§2460(a). 40CFR63§2460(c)(3) establishes operating limits under the conditions required by the initial compliance demonstration. This testing was completed on October 7, 2008, and established that the thermal oxidizer be operated at or above 1,350°F. Condition 4.1.2 requires the Permittee to operate the Thermal Oxidizer V002 (217.003) above 1,350°F.

Condition 4.1.17 contains the requirements for Halogenated Group 1 Continuous Process Vents that uses a halogen reduction device before or after the combustion control device. The Permittee may use 2.a.i. or ii. of Table 1 to comply with 40CFR63§2455(a). 40CFR63§2450(e)(3) requires the Permittee to comply with 40CFR63§63.994 to use a halogen reduction device to reduce hydrogen halide and halogen HAP emissions from halogenated vent streams. 40CFR63§994(b) requires an initial performance test to comply with that section, said testing being done as described in 40CFR63§997. This testing was completed on October 7, 2008, and established that the influent water (liquor) flow rate of the packed bed water absorber V003 (217.003) at a minimum of 70°C, and a density of between 1.010 g/cc and 1.015 g/cc. Condition 4.2.8 requires the Permittee to operate the absorber under these operating conditions.

Condition 4.1.18 contains the requirements for Halogenated Group 1 Batch Process Vents that uses a halogen reduction device before or after the combustion control device. The Permittee may use 2.a. or b. of Table 2 to comply with 40CFR63§2460(a). 40CFR63§2460(c)(3) establishes operating limits under the conditions required by the initial compliance demonstration. This testing was completed on October 7, 2008, and established that the influent water (liquor) flow rate of the packed bed water absorber V003 (217.003) at a minimum of 70°C, and a density of between 1.010 g/cc and 1.015 g/cc. Condition 4.2.8 requires the Permittee to operate the absorber under these operating conditions.

Condition 4.5.2 requires the Permittee to comply with Subpart FFFF Group 1 requirements if any of the Group 2 emission points become Group 1. Condition 4.5.3 requires the Permittee to document in its compliance report certain process changes.

Condition 4.5.4 contains the notification requirements for Subpart FFFF. Condition 4.5.5 contains the requirements for both the timing of the compliance reports as well as the contents of the reports. Condition 4.4.3 contains the recordkeeping requirements for Subpart FFFF.

Glycolic Acid

40CFR63 Subpart FFFF – *Miscellaneous Organic NESHAP* (“MON”)
The Glycolic Acid Unit is subject to Subpart FFFF.

Condition 5.1.25 contains the requirements for equipment leaks for equipment that is in organic HAP service. The facility is using the provisions of 1.b. of Table 6 of Subpart FFFF, which requires compliance with Subpart H, with exceptions as listed in 40CFR63§§2480(b) and (d).

Condition 5.1.26 contains the requirements for Group 1 Continuous Process Vents that are controlled by a combustion device (not a flare). The Permittee has chosen to use 1.a of Table 1 to comply with 40CFR63§2455(a). 40CFR63§2450(e) requires the Permittee to comply with 40CFR63§63.982(c) when reducing organic HAP emissions by venting emissions through a closed-vent system to an incinerator. 40CFR63§63.982(c)(2) requires the Permittee to follow the operating requirements of 40CFR63§988 for incinerators. 40CFR63§988(b) requires an initial performance test to comply with that section, said testing being done as described in 40CFR63§997. This testing was completed on October 7, 2008, and established that the thermal oxidizer be operated at or above 1,400°F. Condition 5.2.7 requires the Permittee to operate the Thermal Oxidizer G040 (251.040) above 1,400°F.

Condition 5.5.2 requires the Permittee to comply with Subpart FFFF Group 1 requirements if any of the Group 2 emission points become Group 1. Condition 5.5.3 requires the Permittee to document in its compliance report certain process changes.

Condition 5.5.4 contains the notification requirements for Subpart FFFF. Condition 5.5.5 contains the requirements for both the timing of the compliance reports as well as the contents of the reports. Condition 5.4.4 contains the recordkeeping requirements for Subpart FFFF.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. 40 C.F.R. Part 64 - Compliance Assurance Monitoring (CAM)

This Group does not have a pollutant specific emissions unit (PSEU) for any pollutant meeting the applicability requirements of 40 C.F.R. §64.2 and therefore does not need to have submitted a CAM plan in accordance with the CAM rule.

This facility is not subject for the following reasons:

40CFR§64.2(a)(3) – This Group does not have a potential pre-control device equal to or greater than 100 percent of the amount, in tons per year, of any pollutant that would require the facility to be classified as a major source.

2. 45CSR§6-4.4 Stoking Operations

The Permittee does not have stoking operations at this facility, so the provisions for opacity standards during stoking operations have been removed from Condition 5.1.11.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date:	September 8, 2009
Ending Date:	October 8, 2009

All written comments should be addressed to the following individual and office:

Mike Egnor
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Mike Egnor
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Division of Air Quality
601 57th Street SE
Charleston, WV 25304
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Response to Comments (Statement of Basis)

Not applicable.